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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,090	05/24/2001	Harold R. Garner	UTSD:0668	2902

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EXAMINER

BRUSCA, JOHN S

ART UNIT	PAPER NUMBER
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1631

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,090

Applicant(s)

GARNER ET AL.

Examiner

John S. Brusca

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,8-10 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal Brief filed on 31 May 2005, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The group and or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1631.

3. This application has been reassigned to a new examiner.

4. All grounds of rejection in the previous Office action mailed 03 August 2004 have been withdrawn in view of the arguments presented in the Appeal Brief filed 31 May 2005.

5. The claimed methods and apparatus are interpreted to search and utilize sequence identifiers and annotations, but to not search and utilize sequence data of biopolymer subunits such as nucleotide sequences or amino acid sequences. In addition, the first database of the claims is utilized for correlations between sequence identifiers and sequence data, but any sequence data that may be present in the first database is not utilized.

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Claim Objections

6. Claims 3, 4, 6, 8-10, and 16 are objected to because of the following informalities:

Claims 3 and 4 recite the term “criteria” in the second occurrence of the term in line 2 of claim 3, line 3 of claim 3, the second occurrence of the term in line 2 of claim 4 and line 3 of claim 4. The term should be replaced with the term “criterion.”

Claim 6 recites the term “datasets” in lines 2 and 3. The term should be replaced by the term “dataset.”

Claim 8 recites the term “databases” in line 3 and should be replaced with the term “database.”

Claims 9 and 16 should have a comma inserted after the term “author” if the group is intended to have four members in claim 9 and three members in claim 16.

Claim 10 recites the term “parameters” in the second occurrence of the term in line two and in line 3. The term should be replaced by the term “parameter.”

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 24 is indefinite for recitation of the term “ARROGANT” because it is not clear from the specification what the metes and bounds of the claimed program is. The program is discussed in the specification without clearly defining all of the steps the program executes or defining what steps the program does not execute.

Claims 1-17 and 21-24 are indefinite for recitation of the term “syngeneic” because it is not clear what the term means in the context of the claimed invention. Stedman’s Medical Dictionary 27th Edition defines the term as “relating to genetically identical individuals” (see provided printout noted on the list of cited references attached to this Office action). However the specification states on page 11, lines 18-21:

The database need not be perfectly syngeneically ordered (i.e. natural polynucleotides or polypeptides ordered by common source gene) and the recited correlation need not be perfect, but only sufficient to effect the required reduction in redundancy.

The specification does not otherwise discuss what is meant by syngeneic. The dictionary definition does not logically make sense in the context of reduction of redundancy in sequence databases which would have entries of different individuals, nor does the above passage in the specification state what is meant by the term syngeneic in the context of the claimed subject matter. The rejection would be overcome by deletion of the term in claims 1, 8, 13, 14, 17, 21, and 23.

Claims 1-24 are indefinite for recitation of the phrase “natural complex biopolymer.” The metes and bounds of the phrase is not clear. It is not clear if the term “natural” excludes recombinant sequences and mutations of naturally occurring sequences. It is not clear how complex a sequence must be to be a complex biopolymer, nor is it clear how the complexity

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level is to be measured. The rejection would be overcome by deletion of the terms “natural complex” from claims 1, 11, 13, 14, 17, 18, and 20-23.

Claims 1-24 are indefinite because it is not clear in the preamble whether it is “the targeted collection of sequences” or the “dataset” that comprises sequence identifiers. This causes subsequent antecedent basis for “the targeted collection” and “the dataset” to be unclear.

Claims 1-24 are indefinite because it is not clear how the targeted collection of sequences is generated from the third subset because sequences are not present in the third subset.

Claims 5 and 7 contain the trademark/trade name GenBank, Medline, and KEGG. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe databases that are subject to revision and, accordingly, the identification/description is indefinite.

Conclusion

9. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is

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(866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center at (800) 786-9199. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Brusca whose telephone number is 571 272-0714. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, PhD. can be reached on 571 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John S. Brusca 23 August 2005

John S. Brusca
Primary Examiner
Art Unit 1631

jsb

Ardin H. Marschel 8/23/05
ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER